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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/076,340 | 02/14/2002 | Deanna Lynn Quigg Brown | AUS920010897US1 | 1998 |

7590 03/15/2006
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EXAMINER

WONG, BLANCHE

ART UNIT PAPER NUMBER

2667

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,340

Applicant(s)

QUIGG BROWN ET AL.

Examiner

Blanche Wong

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On p. 9, host bus adapter is referenced 401 in line 29 and 410 in line 32.

On p. 13, ln. 5, -- identification field is included -- should be "identification field that is included".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. **Claims 3-5,8-10,13-15,18-20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3, line 1, whether -- the network connections -- is the same as -- a plurality of network connections -- in claim 2, ln. 1-2. Similar error found in claims 8,13 and 18.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-4,6-9,11-14,16-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Duncanson (U.S. Pat No. 5,231,649) in view of Jain et al. (Pub No. US2003/0081582 A1).

With regard to claims 1,6,11,16, Duncanson discloses
determining whether the number of packets exceeds a threshold number (the amount of the bandwidth of the channel, col. 2, ln. 60; see also a value stored in the memory 58, col. 4, ln. 18); and
transmitting the packets in parallel (a plurality of communication N channels, col. 3, ln. 1), if the number of packets exceeds the threshold number (the number of channels is changed in response to the amount of non-data characters in the digital stream, col. 4, ln. 36-39), each packet having an indicium for properly reconstructing the data by the target system (an RX control unit 14 receives digital data ... reassembled into a single stream of digital data, col. 3, ln. 21-23).

However, Duncanson fails to explicitly show how the reconstructing of the data by the target system is done.

In an analogous art, Jain disclose each packet having an indicium (sequence IDs, para. [0118]) for properly reconstructing the data by the target system.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include an indicium per packet for properly reconstructing the data by the target system. The suggestion/motivation for doing so would have been to provide for transferring IP packets by aggregating multiple communication channels, and thus maximizing data rate. Jain, para. [0011]. Therefore, it would have been obvious to

combine Jain with Duncanson for the benefit of transferring IP packets by aggregating multiple communication channels, and thus maximizing data rate, to obtain the invention as specified in claims 1,6,11,16.

With regard to claims 2,7,12,17, the combination of Duncanson and Jain discloses the method of claim 1. Duncanson further discloses a plurality of network connections are established to transfer the packets in parallel (a plurality of communication N channels, col. 3, ln. 1).

With regard to claims 3,8,13,18, the combination of Duncanson and Jain discloses the method of claim 2. However, Duncanson fails to explicitly show the network connections are TCP/IP connections.

In an analogous art, Jain discloses the network connections are TCP/IP connections (link layer protocol, para. [0116], transport layer protocol, para. [0117], IP packets, para. [0120]; see also Internet, para. [0111]).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include network connections that are TCP/IP connections. The suggestion/motivation for doing so would have been to provide for transferring IP packets by aggregating multiple communication channels, and thus maximizing data rate. Jain, para. [0011]. Therefore, it would have been obvious to combine Jain with Duncanson for the benefit of transferring IP packets by aggregating multiple communication channels, and thus maximizing data rate, to obtain the invention as specified in claims 3,8,13,18.

With regard to claims 4,9,14,19, the combination of Duncanson and Jain discloses the method of claim 3. However, Duncanson fails to explicitly show each packet has an IP header, said IP header having an IP identification field.

In an analogous art, Jain discloses IP packet (para. [0120]). It is inherent in Jain's IP packets that each IP packet has IP header and IP headers are some IP identification field.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to IP packets. The suggestion/motivation for doing so would have been to provide for operate an IP environment where transferring IP packets by aggregating multiple communication channels, and thus maximizing data rate. Jain, para. [0011]. Therefore, it would have been obvious to combine Jain with Duncanson for the benefit of an IP environment, to obtain the invention as specified in claims 4,9,14,19.

With regard to claim 6, Duncanson further discloses computer program product or code (it would have been obvious that there is some computer program product or code executed by a microprocessor, col. 4, ln. 18).

Allowable Subject Matter

6. Claims 4,5,9,10,14,15,19,20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2667

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

BW

February 25, 2006



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